

AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior listings and versions:

1. (canceled).
2. (currently amended): An isolated protein consisting of the amino acid sequence of SEQ ID NO:1, with one or more mutations that reduce or eliminate ADP-ribosylating activity of the protein, wherein the one or more mutations are made at least one of the following amino acid residues of SEQ ID NO:1: 504, 506, 537, 539, 548, 564, 567, 570, 573, 574, and 576.
3. (original): The protein of claim 2, wherein the amino acid sequence contains between one and twenty mutations.
4. (canceled).
5. (previously presented): The protein of claim 2, wherein the mutation(s) are independently substitutions, insertions, and/or deletions.
6. (original): The protein of claim 5, wherein the mutation(s) include single amino acid substitutions.
- 7 to 11. (canceled).
12. (currently amended): A protein of claim 1 9, wherein said protein is associated with at least one molecule of NAD, nicotinamide and/or ribosyl- ADP.
13. (previously presented): The protein of claim 2, for use as an adjuvant.
14. (original): The protein of claim 13, for use as a mucosal adjuvant.

15. (previously presented): A method of raising an immune response in an animal, the method comprising the step of administering a protein according to claim 2 to said animal.

16. (previously presented): An immunogenic composition comprising the protein of claim 2 in admixture with an antigen.

17. (withdrawn): An antibody which binds to the protein of claim 2.

18. (withdrawn): An isolated nucleic acid encoding the protein of claim 2.

19. (withdrawn): An isolated nucleic acid comprising the nucleotide sequence recited in SEQ ID NO:2.

20. (withdrawn): An isolated nucleic acid comprising a fragment of 10 or more nucleotides from the nucleic acid of claim 18.

21. (withdrawn): A vector comprising a nucleic acid sequence of the nucleic acid of claim 18.

22. (withdrawn): A host cell transformed with the vector of claim 21.

23. (withdrawn): A composition comprising the nucleic acid of claim 18.

24. (withdrawn): A composition comprising the antibody of claim 17.

25. (withdrawn): A method of treating or preventing bacterial infection, the method comprising administering a protein according to claim 2 or a nucleic acid encoding the protein to a subject.

26. (withdrawn): The method of claim 25, wherein the bacterial infection is caused by Listeria monocytogenes.

27. (withdrawn): The method of claim 26, wherein the bacterial infection is listeriosis.

28. (canceled).